

**Commonwealth of Kentucky**  
**Division for Air Quality**  
**PERMIT STATEMENT OF BASIS**

Title V draft permit, No. V-98-023  
**Jim Beam Brands Company, Clermont Plant**  
Clermont, Kentucky 40110  
May 12, 2000  
MUHAMMAD RAHMAN

**SOURCE DESCRIPTION, CONTROL EQUIPMENTS & CONSTRUCTION DATES:**

- E. Unit 01: Grain handling operations ( truck unloading receiving hopper, conveyors ( drag-chain & screw), bucket elevators, and storage silos equipped with enclosures, or bagfilters, and unpaved roads equipped with wet suppression equipment commenced construction between 1940 and 1974.
  
- E. Unit 02: Fermentation process commenced construction in 1974.
  
- E. Unit 03: Grain dryer equipped with a cyclone collector and wet scrubber and commenced construction in 1970.
  
- E. Unit 04: Storage Silos cyclone equipped with a baghouse and commenced construction in 1990.
  
- E. Unit 05: Barrel filling, aging, and dumping commenced construction in 1936.
  
- E. Unit 06: Holding & Bottling Tanks and pipeline peripheral equipment and components commenced construction in 1940.
  
- E. Unit 07: 95.2 MMBTU/hour horizontally opposed natural gas fired indirect heat exchanger equipped with low NOx burners and flue gas recirculation commenced construction in 1970.
  
- E. Unit 08: 99 MMBTU/hour spreader-stoker coal fired indirect heat exchanger equipped with a baghouse and commenced construction in 1985.
  
- E. Unit 09: 25.1 MMBTU/hour horizontally opposed natural gas fired indirect heat exchanger equipped with a baghouse and commenced construction in 1986.
  
- E. Unit 10: Wastewater treatment system commenced construction in 1989.

JIM BEAM BRANDS CLERMONT PLANT  
STATEMENT OF BASIS  
PAGE TWO

REGULATION APPLICABILITY:

All the applicable regulations to the emission units are listed in the permit. The following regulations are not applicable based on size of emission unit or applicability date of regulation.

**Regulations not applicable to Emissions Units 07, 08 and 09 due to applicability date and/or size of unit:**

Regulation 401 KAR 60:042, Standards of performance for industrial-commercial-institutional steam generating units, incorporating by reference Title 40 CFR, Part 60, Subpart Db, applicable to an emissions unit of greater than 100 MMBtu/hour and constructed after June 19, 1984

Regulation 401 KAR 60:043, Standards of performance for small industrial-commercial-institutional steam generating units, incorporating by reference 40 CFR Part 60, Subpart Dc, applicable to an emissions unit with a design capacity of 100 MMBtu/hour or less and greater than or equal to 10 MMBtu/hour and constructed after June 9, 1989.

**Regulation not applicable to Emission Unit 06 due to applicability date:**

Regulation 401 KAR 60:480, Standards of performance for equipment leaks of VOC in the synthetic organic chemicals manufacturing industry, incorporating by reference 40 CFR 60.482, Subpart VV, applicable to VOC leaks in affected facilities that commenced construction or modification after January 5, 1981.

COMMENTS:

- The permittee has not proposed any alternate operating scenarios for any of the emissions units.
- This permit contains one sulfur dioxide emission cap for Emissions Unit 07 ( 95.2 MMBTU/hour horizontally opposed natural gas fired unit). Sulfur dioxide emissions shall not exceed 249 tons in any twelve (12) consecutive months. This annual limitation is being imposed to preclude the existing source from being considered major as defined in Regulation 401 KAR 51:017 (Prevention of Significant Deterioration).
- This permit contains one sulfur dioxide emission cap for Emissions Unit 08 ( 99 MMBTU/hour spreader stoker coal fired unit ) and limits emissions of sulfur dioxide to below 249 tons/year to preclude applicability of Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality.

JIM BEAM BRANDS CLERMONT PLANT  
STATEMENT OF BASIS  
PAGE THREE

- This permit contains one sulfur dioxide emission cap for Emissions Unit 09 ( 25.1 MMBTU/hour horizontally opposed natural gas fired unit) and contains synthetic minor construction limitations for the emissions of sulfur dioxide to below 39 tons/year to preclude applicability of Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality.
- The permittee will be required to conduct one particulate matter mass emission performance test for emissions unit 08 to demonstrate compliance with allowable particulate matter mass emission standard once within the term of this permit.
- Emissions unit 01 is subject to Regulation 401 KAR 63:010, Fugitive emissions and is considered to be compliance when using control measures required by regulation.
- The three hour averaging time associated with the particulate matter mass emission standards for emissions units 03, 07, 08, and 09 are applicable during compliance demonstration when performance tests are required by the Division.
- The permittee may ensure compliance with the emissions limitations and standards conditioned within the permit for Emissions Units 07, 08, & 09 by performing the calculations based upon heat and sulfur content, fuel usage and processing rates, and emission factor information. Additionally, the permittee is required to monitor the fuel consumption rates, processing rates, and operation of each respective unit's control equipment used to control emissions.
- Emissions Unit 03 is equipped with a wet scrubber to control emissions of particulate matter and U.S. EPA Reference Method 9 opacity determinations of emissions from this type of source produces biased results. The U.S. EPA will issue policy and provide guidance concerning this in future rules to amend/incorporate Reference Methods pertaining to this problem.
- No applicable regulations apply to Emissions Units 02, 05, 06, and 10; however, the permittee is required to monitor processing & production rates and hours of operation due to the emissions potential of each designated unit.
- Any indirect heat exchanger burning natural gas is considered to be in compliance with PM, SO<sub>2</sub> and opacity standard.
- Pursuant to Regulation 401 KAR 59:015, Section 3(3), source wide ( Emissions Units 07, 08, and 09) sulfur dioxide emissions shall not exceed 2.66 lbs/MMBTU while burning coal and 2.46 lbs/MMBTU while burning natural gas and No.2 fuel oil based on a calendar month average.

JIM BEAM BRANDS CLERMONT PLANT  
STATEMENT OF BASIS  
PAGE FOUR

- For Emission unit 03 , Emission factor for PM emissions is 0.356 lbs/ton, controlled emission factor from most recent stack test. This emission factor can be changed through future stack test.
- For Emission unit 08 , Emission factor for PM emissions is 0.34 lbs/ton, based on uncontrolled emission factor ( 66 lbs/ton) from AP-42 and control efficiency of 99.5% . This emission factor can be changed through future stack test.

**CREDIBLE EVIDENCE:**

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.